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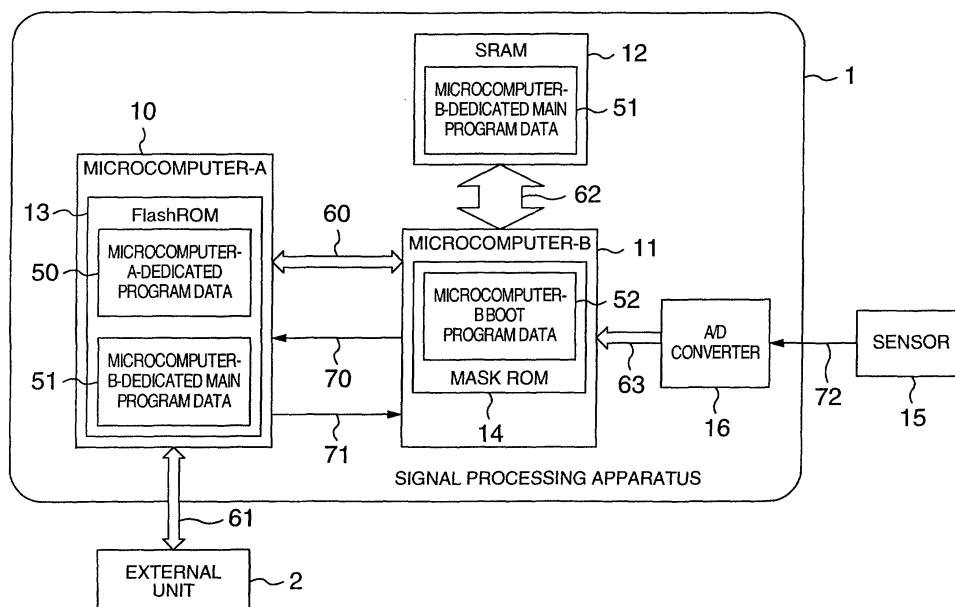
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(54) **Signal processing apparatus having a plurality of microcomputers and a shared rom**

(57) A signal processing apparatus using a plurality of microcomputers and a shared ROM. A microcomputer-A (10) is connected to a microcomputer-B (11) by way of a serial interface (60) and a GPIO signal line (70). A flash ROM (13) incorporated in the microcomputer-A (10) has a program memory map (400) corresponding to the microcomputer-A (10), wherein a run start address (405) of the microcomputer-B (11), a program data

size (406) and program data (407) therefor are disposed in a parameter table area (403) of the program memory map (400) corresponding to the microcomputer-A (10). Upon power-up, the microcomputer-A (10) transfers data to the microcomputer-B (11) via the serial interface (60), whereupon the microcomputer-B (11) executes signal processing in the ordinary operation mode.

FIG.1





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EUROPEAN SEARCH REPORT

Application Number
EP 02 00 4211

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 5 659 748 A (B. KENNEDY) 19 August 1997 (1997-08-19) * column 1, line 65 - column 2, line 51 * * column 9, line 52 - column 10, line 51 * * claims; figure 4 *	1, 7	G06F15/177 G06F9/445
A	----- EP 0 840 224 A (SGS-THOMSON) 6 May 1998 (1998-05-06) * the whole document *	2-6, 8-12	
A	----- US 5 757 639 A (M. YAMADA) 26 May 1998 (1998-05-26) * the whole document *	1-12	
A	----- US 5 687 073 A (K. KISHIMOTO) 11 November 1997 (1997-11-11) * the whole document *	1-7	
A	----- US 5 687 073 A (K. KISHIMOTO) 11 November 1997 (1997-11-11) * the whole document *	1-12	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			G06F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 14 January 2003	Examiner Soler, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 00 4211

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-01-2003

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5659748	A	19-08-1997	US 5450576 A	12-09-1995
			AU 661016 B2	13-07-1995
			AU 2270992 A	25-01-1993
			CA 2111237 A1	07-01-1993
			DE 69222528 D1	06-11-1997
			DE 69222528 T2	16-04-1998
			EP 0591437 A1	13-04-1994
			JP 6508705 T	29-09-1994
			WO 9300628 A1	07-01-1993
EP 840224	A	06-05-1998	DE 69712587 D1	20-06-2002
			DE 69712587 T2	09-01-2003
			DE 69713856 D1	14-08-2002
			DE 69715346 D1	17-10-2002
			DE 69715557 D1	24-10-2002
			DE 69715558 D1	24-10-2002
			EP 0840220 A1	06-05-1998
			EP 0840221 A1	06-05-1998
			EP 0840222 A1	06-05-1998
			EP 0840223 A1	06-05-1998
			EP 0840224 A1	06-05-1998
			JP 10232792 A	02-09-1998
			JP 10247188 A	14-09-1998
			JP 10222395 A	21-08-1998
			JP 10240713 A	11-09-1998
			JP 10240712 A	11-09-1998
			US 6301657 B1	09-10-2001
			US 6401191 B1	04-06-2002
			US 5978870 A	02-11-1999
US 5757639	A	26-05-1998	JP 3310990 B2	05-08-2002
			JP 4315253 A	06-11-1992
			US 5552981 A	03-09-1996
			US 6275875 B1	14-08-2001
US 5687073	A	11-11-1997	JP 7253960 A	03-10-1995